10/706,413

- 1. (CURRENTLY AMENDED) A breather system for a motorcycle engine, the motorcycle engine being a V-twin engine having a rear and a front cylinder head and arranged such that a crankshaft of the engine is oriented in a direction substantially perpendicular to a driving direction of the motorcycle, the breather system having a chamber for collecting blow-by gas, the breather system and comprising
- a manifold portion having a wider portion and a narrower portion, the manifold portion being arranged to be disposed between an air-filter element and a throttle valve, of the engine so as to channel air into the engine, and
- a conduit having an inlet being arranged to receive the blow-by gas from the chamber and an outlet that is in use connected to the manifold portion such that a passage is provided between the chamber and the manifold portion,

wherein the manifold portion [[is]] being arranged so that in use dynamic pressure of the channeled air at the wider portion of the manifold portion is lower than at the narrower portion and [[the]] an established pressure gradient facilitates removal of the blow-by gas from the chamber.

a bridge portion incorporating a passage and having a first end-portion for connection to the rear cylinder head and a second end-portion for connection to the front cylinder head, the bridge portion being arranged to connect the rear and front cylinder heads with the inlet of the conduit such that, in use, the blow-by gas that enters the bridge portion from either of the rear or front cylinder heads will be guided through the conduit into the manifold portion.

- 2. (ORIGINAL) The breather system as claimed in claim 1 wherein the manifold portion tapers in cross-sectional area from the wider portion to the narrower portion.
 - 3. (CANCELED)
- 4. (PREVIOUSLY AMENDED) The breather system as claimed in claim 1 wherein the throttle valve is a throttle valve of a carburetor.
- 5. (ORIGINAL) The breather system as claimed in claim 1 wherein the outlet of the conduit is arranged for connection to a bottom portion of the manifold.
 - 6-11. (CANCELED)
- 12. (CURRENTLY AMENDED) A <u>V-twin</u> motorcycle engine <u>having a rear and a front cylinder head and arranged such that a crankshaft of the engine is oriented in a direction substantially perpendicular to a driving direction of a motorcycle, the engine</u>

10/706.413

having a breathing system with having a chamber for collecting blow-by gas, and having a the breather system comprising;

a manifold portion having a wider portion and a narrower portion, the manifold portion being arranged to be disposed between an air-filter element and a throttle valve of the engine so as to channel air into the engine, and

a conduit having an inlet being arranged to receive the blow-by gas from the chamber and an outlet that is in use connected to the manifold portion such that a passage is provided between the chamber and the manifold portion.

wherein the manifold portion is arranged so that in use dynamic pressure of the channeled air at the wider portion of the manifold portion is lower than at the narrower portion and [[the]] an established pressure gradient facilitates removal of the blow-by gas from the chamber, and

a bridge portion incorporating a passage and having a first end-portion for connection to the rear cylinder head and a second end-portion for connection to the front cylinder head, the bridge portion being arranged to connect the rear and front cylinder heads with the inlet of the conduit such that, in use, the blow-by gas that enters the bridge portion from either of the rear or front cylinder heads will be guided through the conduit into the manifold portion.

13. (PREVIOUSLY AMENDED) The motorcycle engine as claimed in claim 12. being arranged so that blow-by gas is directed through the throttle valve of the engine back into the engine.

- 14. (CANCELED)
- 15. (NEW) A breather system for a motorcycle engine having a chamber for collecting blow-by gas, the breather system comprising

a manifold portion having a wider portion and a narrower portion, the manifold portion being arranged to be disposed between an air-filter element and a throttle valve of the engine so as to channel air into the engine, and

a conduit having an inlet being arranged to receive the blow-by gas from the chamber and an outlet that is in use connected to the manifold portion such that a passage is provided between the chamber and the manifold portion,

wherein the manifold portion is arranged so that in use dynamic pressure of the channelled air at the wider portion of the manifold portion is lower than at the narrower portion and the established pressure gradient facilitates removal of the blow-by gas

10/706,413

from the chamber, and

the outlet of the conduit is arranged for connection to a bottom portion of the manifold.